GFE Job Sheet 6: Editing Grids in the Spatial Editor - Edit Area

Objective

This job sheet will familiarize the user with how to make changes to grid values using edit areas.

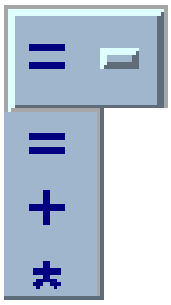
Procedures

A. Define an Edit Area by hand

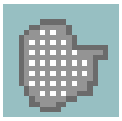
Purpose: To define an edit area.

1. Clear any previously defined edit areas by clicking on the *Clear Edit Area* icon.

2. Make sure that the current edit area mode is set to *Replace* (=) mode.



3. Select the *Draw Edit Areas Tool*.



4. Move the cursor into the Spacial Editor.

5. Use the mouse to *define an edit area* in the spatial editor.

6. *Change the Edit Area Mode* from "=" to "+", and draw another edit area. Notice that both edit areas remain on the screen.

7. *Draw an edit area* that overlaps one of the previously defined edit areas. The new edit area will sum with the existing edit area.

8. *Change the Edit Area Mode* from "+" to "*".

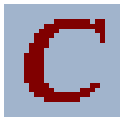
9. Once again, *draw an edit area* that overlaps one of the previously defined edit areas. The "*" or "Intersection" function of the Edit Area Mode function creates a new edit area from the intersection of the overlapping edit areas.

B. Clear an Edit Area

Purpose: To clear the current edit area.

1. Make sure that there is an edit area displayed in the Spatial Editor.

2. Click on the *Clear Edit Area* button on the button bar.



C. Toggle an Edit Area

Purpose: To invert the current edit area.

1. *Define an edit area* in the spatial editor with the Draw Edit Area tool.

2. Click on the *Toggle Edit Area* button on the button bar.

3. All the grid values not selected as an edit area will now be selected as the new edit area.

D. Select a Homogenous Edit area Based on a Value

Purpose: To select an edit area based upon a specific value.

1. Clear any selected edit areas by clicking on the *Clear Edit Area* button.

2. While in Edit Mode for a desired weather element, *move the cursor to a desired grid mid-range value* on the Spatial Editor.

2. Click the *right mouse button* and select *Select Homogenous Area.*

3. A new edit area will now be displayed based upon grid values equaling the chosen grid value plus or minus a Fuzz value. (For example, if the Fuzz value is 2 and the grid value you choose is 80, then the new homogeneous edit area will include all grid values between 78 and 82).

E. Change the Fuzz Value

Purpose: To change the Fuzz Value. The Fuzz Value identifies a range of values that will be effected by edit actions.

1. Clear any previously defined edit areas by clicking on the *Clear Edit Area* icon.

2. In the spatial editor, *right click* and select *Set Fuzz Value* from the pop-up menu.

3. *Change the Fuzz value* to a desired value. Try 5 or higher to see a noticeable effect.

4. Click *Dismiss.*

5. Go through the procedures on how to create a homogenous edit area and notice the change in the edit area created.

F. Remove a Contiguous Edit Area

Purpose: To remove a contiguous edit area.

1. If you created a homogenous edit area, then *move your cursor* to any point within the hatched area.

2. Press the *right mouse button* and select *Deselect Contiguous Area* from the pop-up menu.

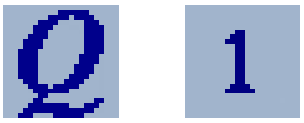
3. The homogenous edit area is now deleted. Of course, you can also click on the Clear Edit Area button to delete an edit area.

G. Saving Edit Areas as Quicksets

Purpose: To temporarily save an edit area.

1. Define an edit area with the *Draw Edit Area* tool.

2. Click the *Quickset* button on the button bar and then one of the numbered buttons to the right of the Quickset button.



3. The edit area is now saved under that particular slot (In the example above, Quickset 1)

H. Loading a Quickset Edit Area

Purpose: To load quickset edit areas that were previously saved.

1. Clear previously defined areas by clicking on the *Clear Edit Area* button in the button bar.

2. *Select the number* of the previously saved Quickset, and that area will be displayed. In the example above, it would be number 1.

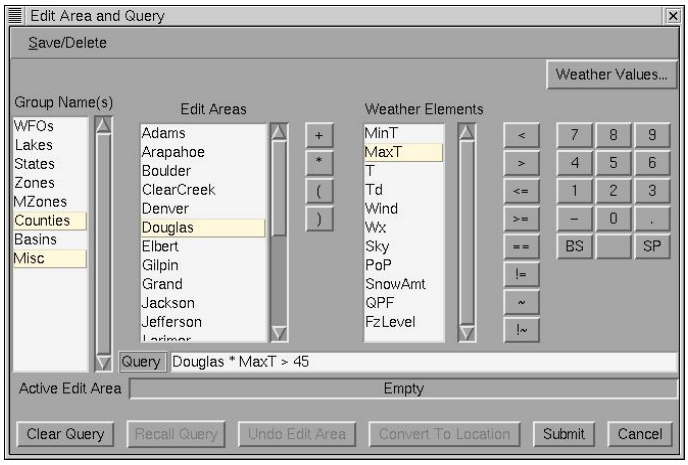
I. Saving Named Edit Areas

Purpose: To save the current edit area as a permanent named set.

1. Define an edit area by using the *Draw Edit Area* tool .

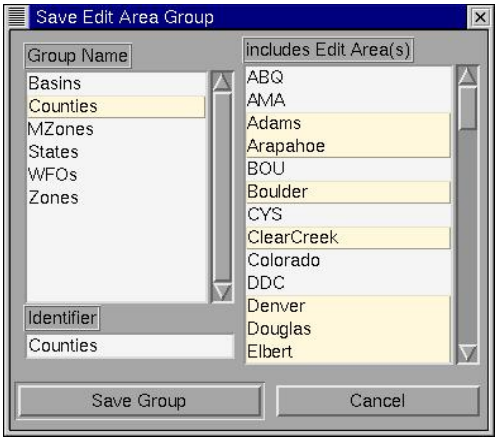
2. Select the Edit Area and Query Dialog button on the button bar.

3. The Edit Area and Query window should appear.



4. Choose the *Save/Delete* selection and then select *Save Edit Area.*

5. From the *Save Active Edit Area* window, *type in a name for your edit area* under the "Identifier" label.



6. Then select the *Save Active Area* button.

7. Close the *Edit Area and Query* window by clicking *cancel.* Your edit area will be saved under the default "Misc" group.

8. Clear the previous edit area.

9. From the main menu, select *Edit Areas*, click on *Misc*, and *click on the edit area* that you saved. Your edit area should be displayed.

J. Saving an Edit Area to an Edit Area Group

Purpose: To assign an edit area to a specific edit area group for easier organization.

1. Click on the *Edit Area Query Dialog* button on the button bar.

2. From the Edit Area and Query window, select the *Save/Delete* selection and then select the *Save Edit Area Group* selection. Name your group anything you want in the space labeled "Identifier".

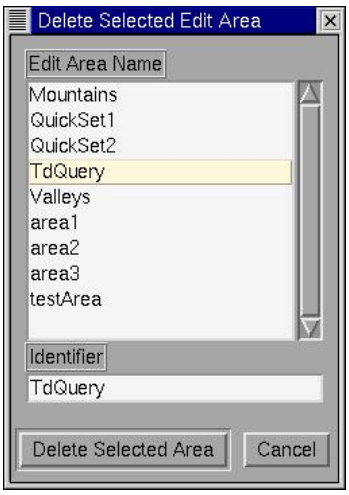
3. *Select one or more edit areas* on the right-hand side of the window that you want to include in your group. You can use the edit area that you created in the previous steps.

4. Click the *Save Group* button on the bottom of the window. You will now have an edit area group under the Edit Areas button on the menu bar.

5. Close the Edit Area and Query window by clicking *cancel.*

6. From the main menu, select *Edit Areas*. You should see the group that you created appear in the list.

7. To remove a particular edit area from an edit area group, click on *Edit Area Query Dialog* button, click on *Save/Delete*, choose *Save Edit Area Group*, Select the name of the group that you want to edit, and deselect the desired areas for the group (the background will be white when an item is deselected), then click Save Group.



8. To remove an entire group, click on the *Edit Area Query Dialog* button, click on *Save/Delete,* choose *Delete Edit Area Group*, and Select the group name that you want to delete, toggle the *Delete All Areas Within Group* button on the bottom of the window, and click *Delete Group*. Ignore any warnings about SITE and BASE level configuration.

NOTE: The edit areas included in the Group will not be deleted unless you specifically choose to do so by checking the "Delete All Areas within Group" button. These areas will also then be deleted from any other group in which they belong.

K. Loading Named Edit Areas

Purpose: To display a named edit area.

1. Click on the *Edit Areas* pull down from the Menu Bar. *Choose any edit area of interest.* It

should appear in the spatial editor.

2. You can also load edit areas by using the *Edit Area Query Dialog* button icon.

L. Edit Area Queries

Purpose: To define an edit area based upon certain data values.

1. Display a temperature (T) grid on the Spatial Editor.

2. *Use the Samples Tool* to determine several values over the grid domain.

3. Select the *Edit Area and Query Dialog* button on the button bar.

4. When the Edit Area and Query window opens, then select *T* from the column labeled Weather Elements.

5. Next, select the greater than sign >.

6. Now *select a mid-range temperature value* that is contained in the grid domain using the number keys.

7. Select the *Submit* button which is located near the bottom of the window.

8. When you submit your query, GFE will draw an edit area based on the mathematical or boolean expression contained in the query.

M. Example of a Complex Query

1. Clear the current edit area by clicking on the *Clear* button.

2. With the temperature grid still loaded, select the *Edit Area and Query Dialog* button again, if it is not already visible.

3. Select *T*, then >, then type in a *representative value* (e.g., 70) using the number keys.

4. Select * (intersect) which is located to the left of the Weather Elements section.

5. Now select *T* again and then the less than sign <.

6. Using the number keys, *type in a value higher than the one used in Step 2* (e.g., 90). They query will look like this: T>70*T<90

7. Select the *Submit* button. The new edit area will be computed by GFE.

N. Example of a Multiple Parameter Query

1. Clear the edit area.

2. *Select the dewpoint (Td) grid* on the Spatial Editor with the temperature (T) grid.

3. Examine the values of each parameter and determine some representative values.

4. Select the *Edit Area and Query Dialog* button.

5. Use the selectors or you can type in a query directly into the Query command line. Use representative values. You may try to create an expression like: *T>80*Td>75*

6. Once you area satisfied with your query, then select the *Submit* button.